

ABSTRACT OF THE DISCLOSURE

A process for catalytic hydrocarbon recombination is disclosed, in which catalytic hydrocarbons are fractionated at fractionators to fractionate a gasoline fraction and a diesel fuel fraction, an intermediate fraction is drawn; the intermediate fraction or the mixture of the intermediate fraction and the gasoline fraction are treated for aromatic hydrocarbon extraction to get aromatic hydrocarbon fraction and non-aromatic hydrocarbon fraction; the aromatic hydrocarbon fraction are fractionated, and the high octane number gasoline fraction obtained are blended with gasoline fraction to increase the octane number of the gasoline; the non-aromatic hydrocarbon fraction are fractionated, and the diesel fuel fraction obtained are blended with the diesel fuel fraction to increase the diesel fuel output and the cetane number of the diesel fuel. In comparison with the prior art, the recombination process of the present invention has low limitation to the raw material, low capital cost, low operation cost, and increases the types of the products.